



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,549	10/15/2001	Matthias Brunner	APP-P10779-US	4145

7590 07/21/2003

Moser Patterson & Sheridan LLP  
3040 Post Oak Boulevard Suite 1500  
Houston, TX 77056

EXAMINER
----------

ANDERSON, BRUCE C

ART UNIT	PAPER NUMBER
----------	--------------

2881

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/977,549

Applicant(s)

BRUNNER ET AL.

Examiner

BRUCE C ANDERSON

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4-2-03 & 5-7-03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15, 17-27 and 29-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15, 17-27 and 29-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/204,430.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 31-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 31 it is unclear by what is meant by "as a function of the location (x1, x2) of the emitted secondary particles relative to the position of the detector"?

3. Claims 38-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 38, the language "is taken into account ... evaluation" is considered vague and indefinite language.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 2881

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 15, 17-27, and 29-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meisburger (968), as applied in the office action of 9-16-02; and further in view of Libby (194) or Nisch (663) or Garth (137).

In amendment of 4-2-03, applicants argue that the main difference between the primary reference to Meisburger (968) and applicants' device is that their device does not scan the substrate but moves the primary particle beam from one select or discrete cite to another.

It is however first noted that applicants do not always claim select or discrete cites; for example, claims 41-43 do not claim any particular cites. Secondly, even if a plurality of particular cites are claimed this makes no difference in determining the characteristics of said cites. For example, Libby discloses that detected secondary signals can be differentiated such that a particular location or cite on the substrate/workpiece can be determined (col.13, first paragraph).

The secondary reference to Nisch (663) further discloses that with a raster scanning particle beam one can align said particle beam to a particular sample location (26) or region (col.6, lines 26-28 or claim 1). Note also that the particle beam may be adjusted to be in focus at the particular location, via the use of deflection plates (28)

Art Unit: 2881

(see Figure 3 or claims 2-3). Hence, it is obvious to one skilled in the art that even if one utilizes a scanning particle beam, one can further determine or evaluate a particular location(s), if so desired.

Lastly, the secondary reference to Garth (137) discloses in col. 4 lines 30-32 that a primary electron beam (2) may be scanned over the sample (3) or be caused to impinge on a particular part if spot measurements are required. It is obvious to anyone of ordinary skill in the art that even if the primary beam can scan a sample/workpiece, one can alternatively configure the system to irradiate only particular locations, in view of the broad teaching of Garth (137). Although no means is shown in Figure 1 of Garth (137), the deflection of the primary particle can be by electrostatic or magnetic means (col. 4 lines 33-36), and the secondary electrons can be guided by electrostatic means (col.5, lines 34-38).

Hence, it is obvious to one of ordinary skill in the art that one may modify Meisburger (968) in any number of ways as per secondary references, **if one wishes to determine or evaluate only particular cites/locations.**

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shariv has been cited to show that a SEM can utilized to analyze particular spots on a sample (co. 6, lines 35-42).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRUCE C ANDERSON whose telephone number is

Art Unit: 2881

703-308-4851. The examiner can normally be reached on MON.-FRI. 6:15AM-3: 45PM (off ALT. FRI.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN LEE can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-2864 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
BRUCE C ANDERSON  
Primary Examiner  
Art Unit 2881

BCA  
May 19, 2003